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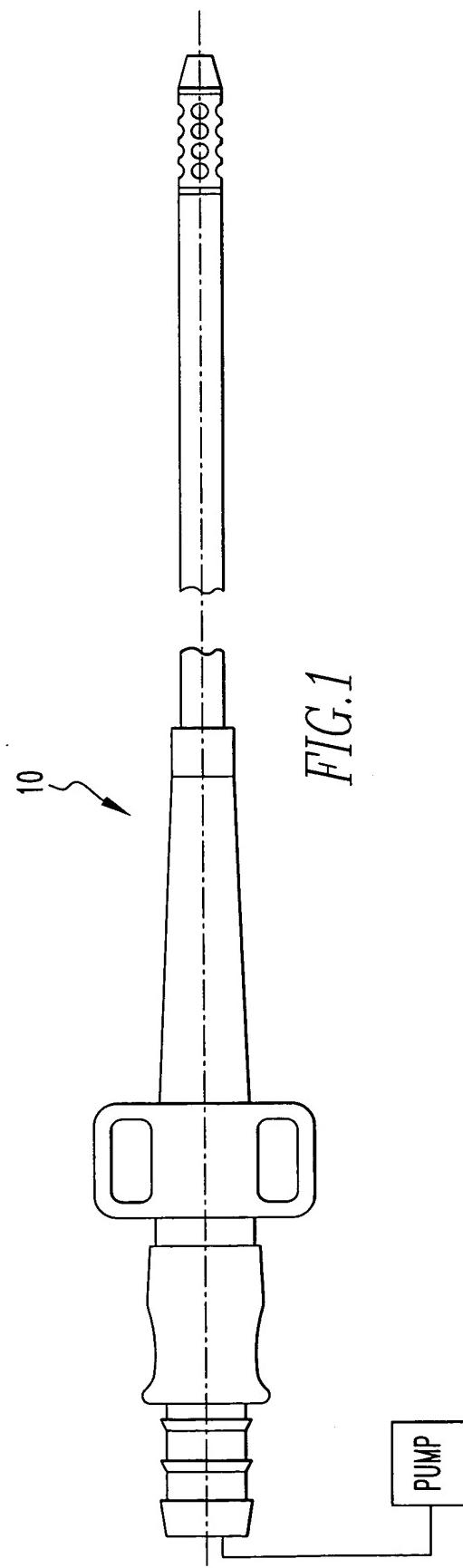


FIG. 1



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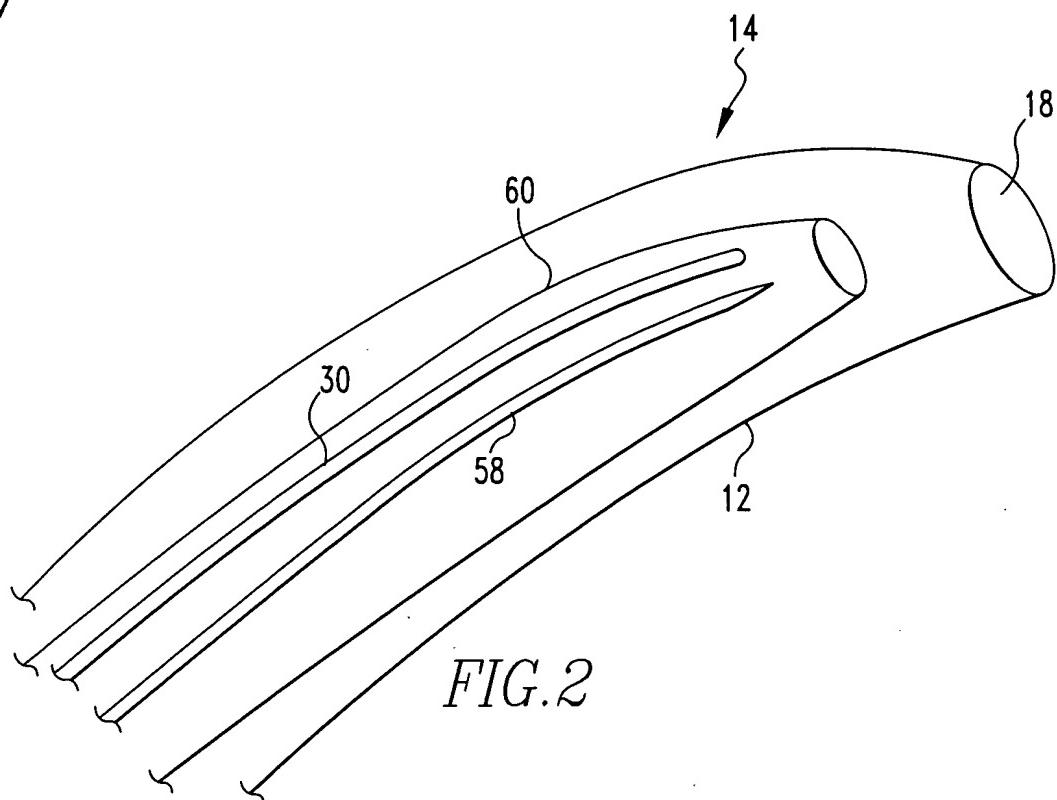


FIG. 2

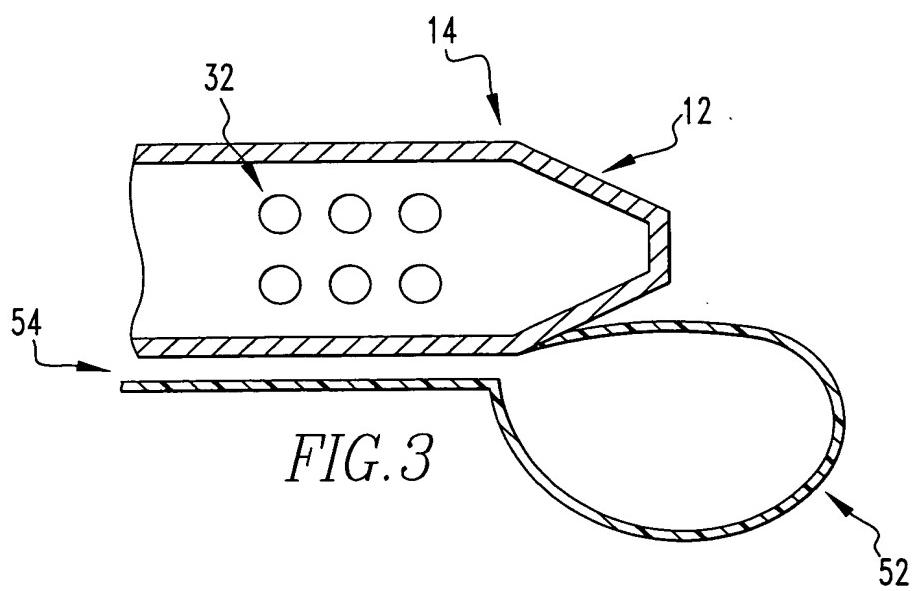


FIG. 3



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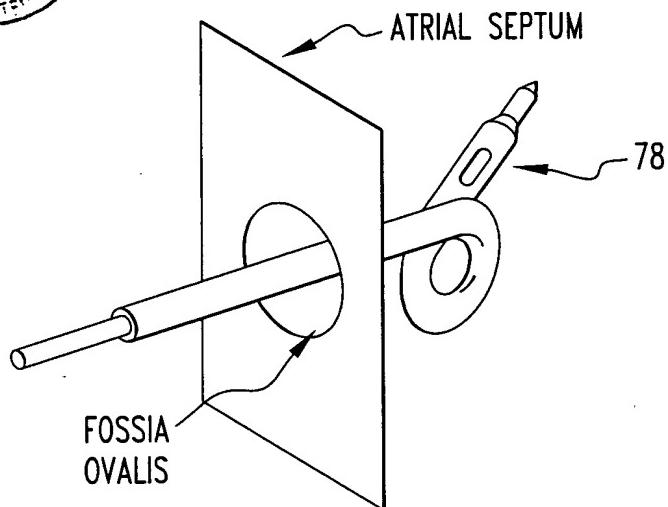


FIG. 4

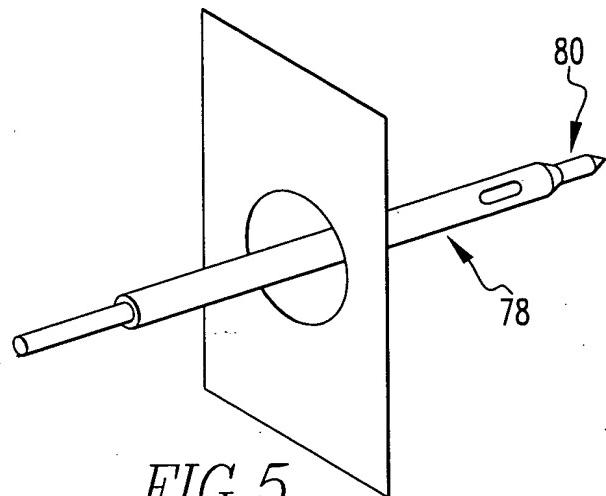


FIG. 5

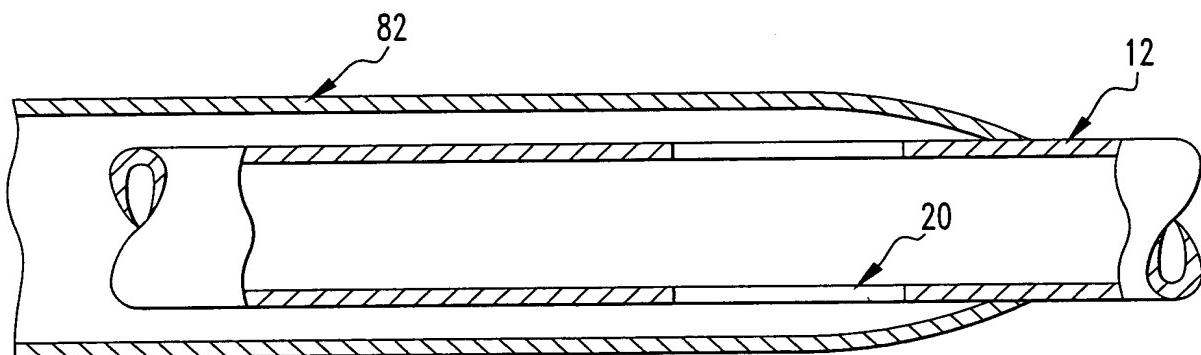


FIG. 6

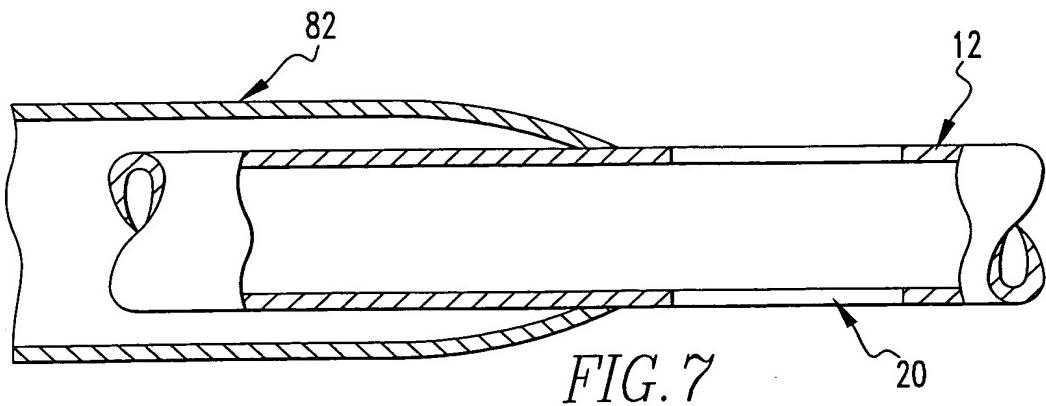


FIG. 7



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SILICONE BALLOON
INFLATED AFTER
INSERTION INTO
THE LEFT ATRIUM

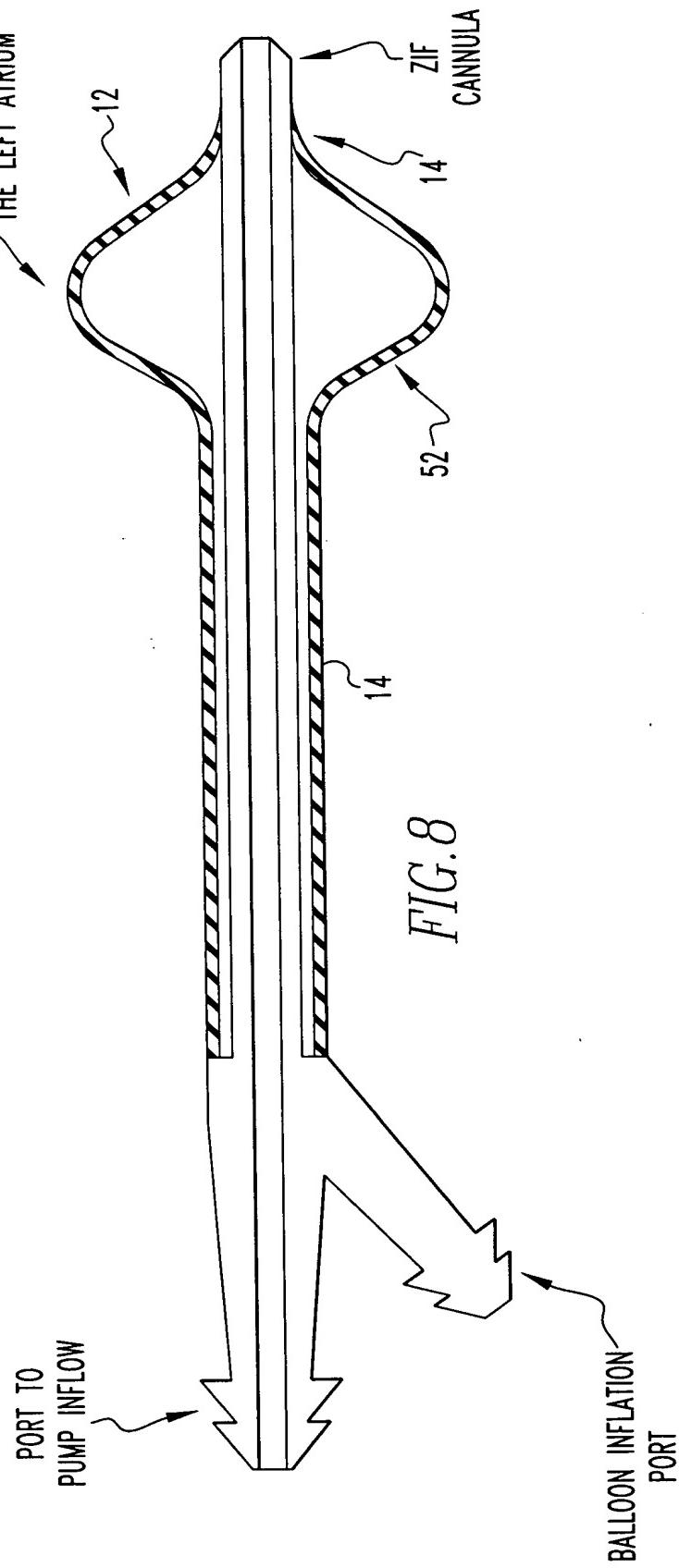
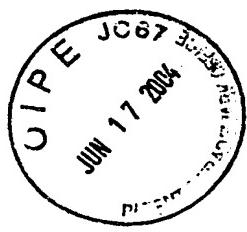


FIG. 8



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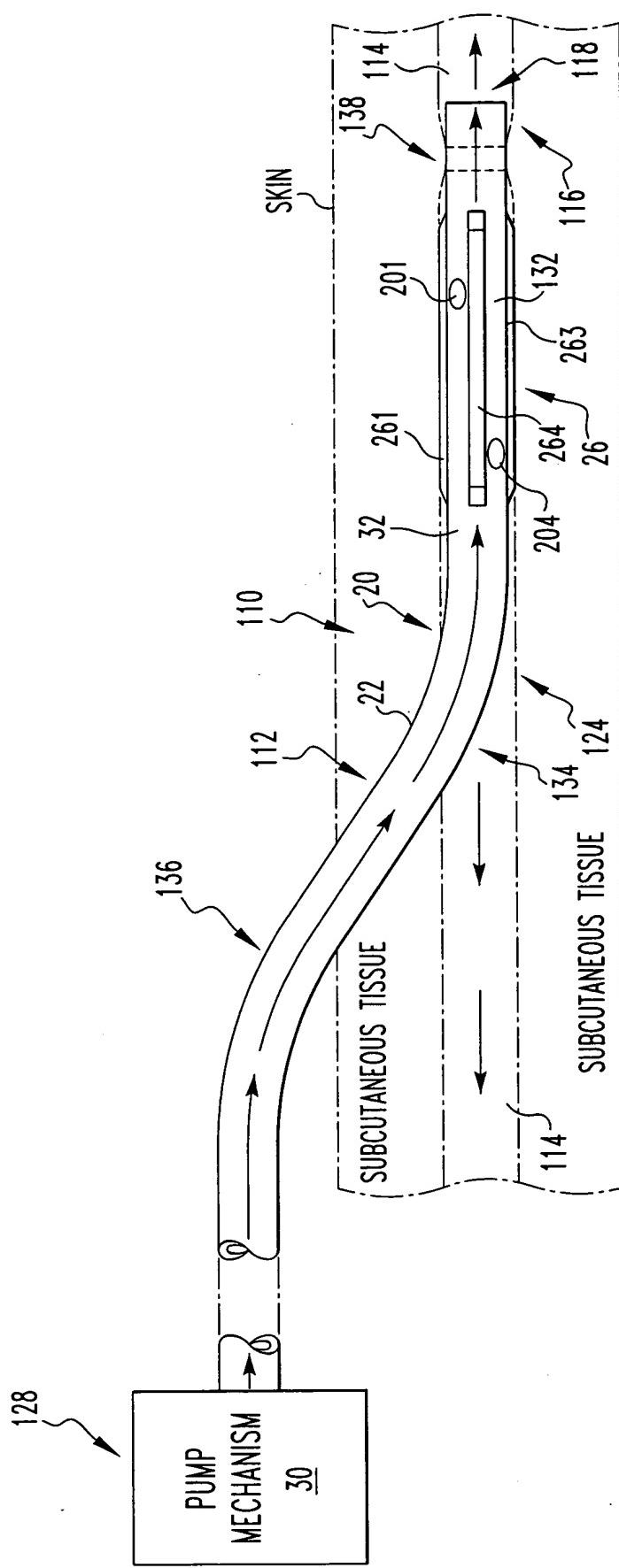


FIG. 9



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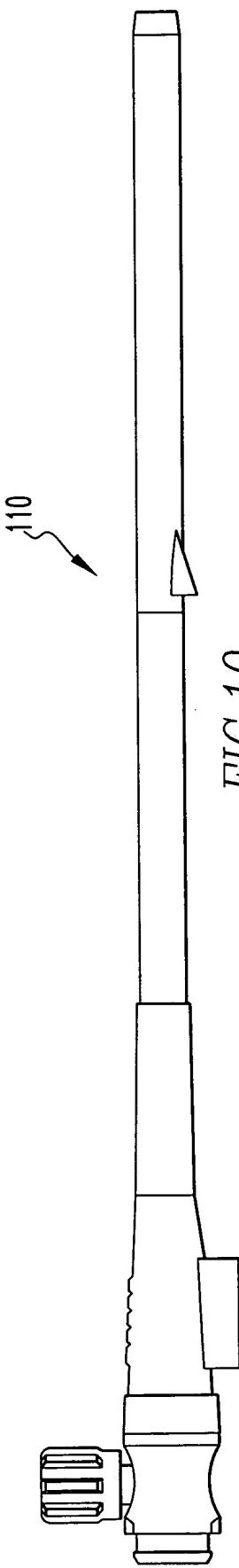
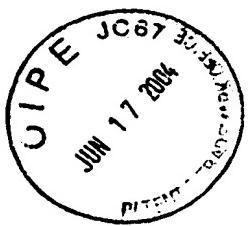


FIG. 10



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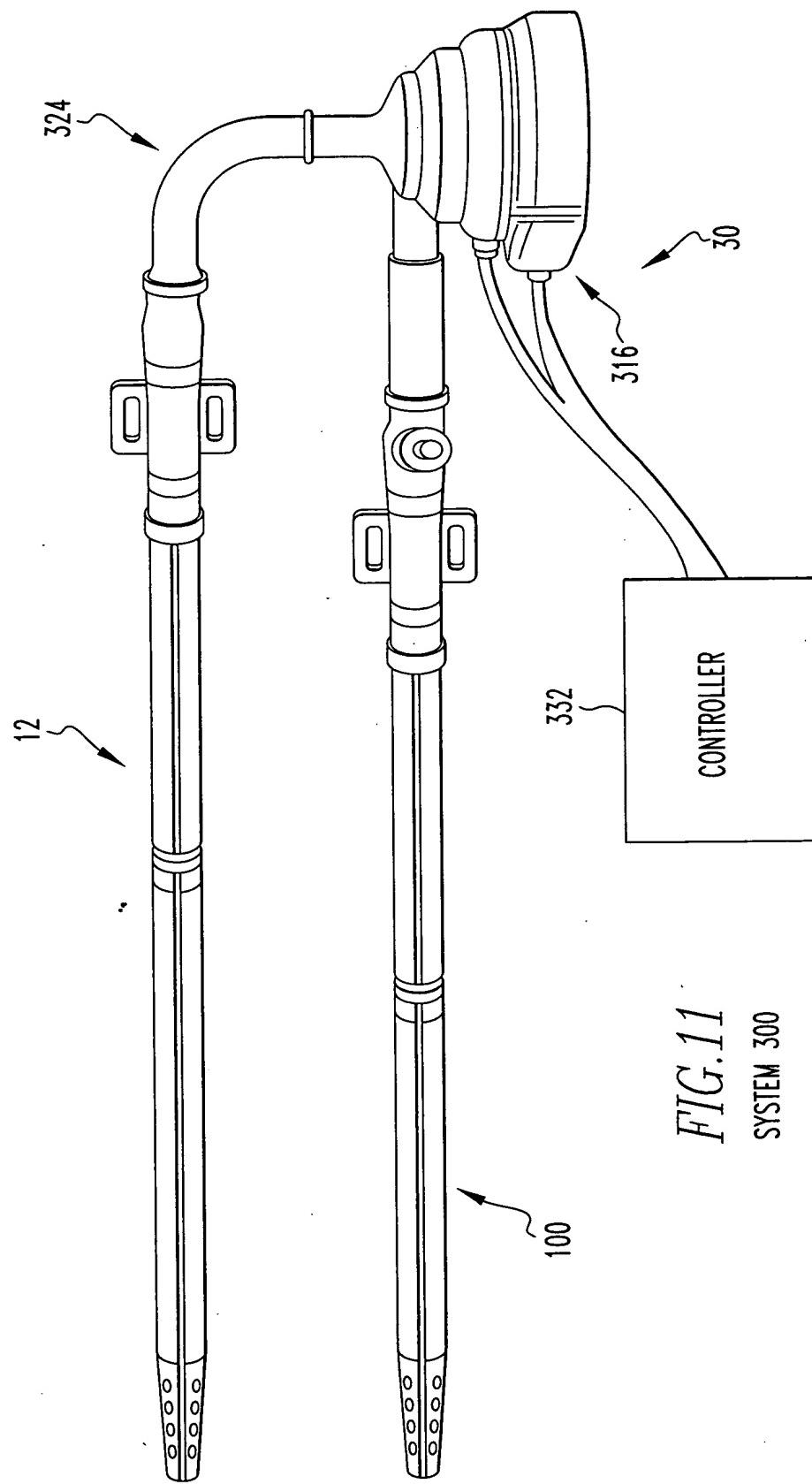


FIG. 11
SYSTEM 300



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FIG.13

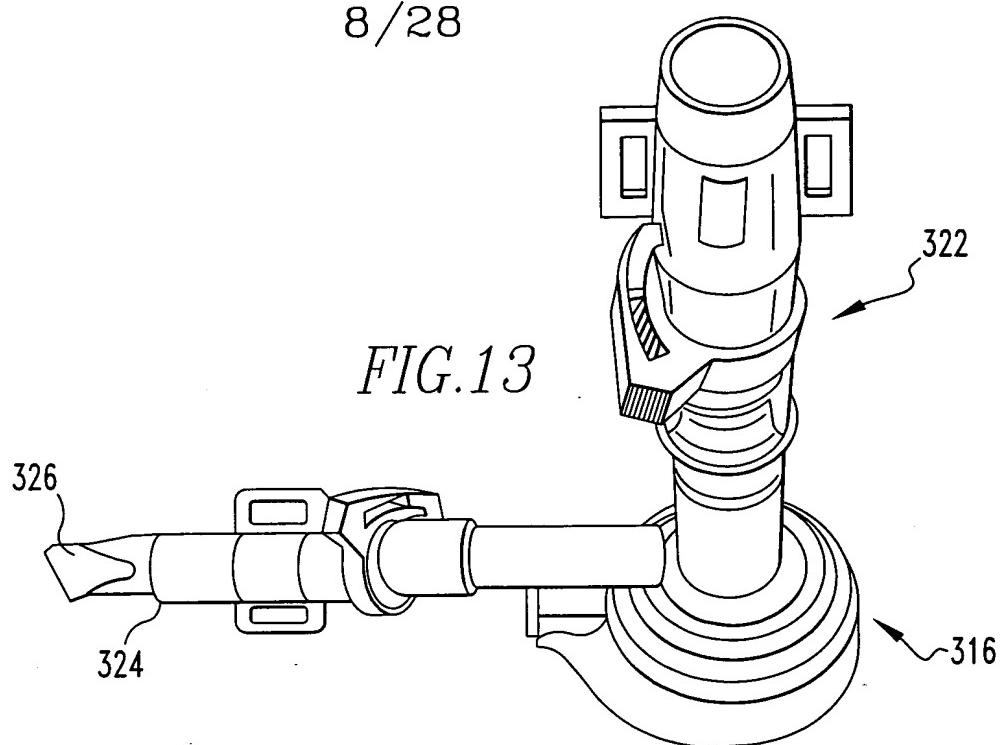
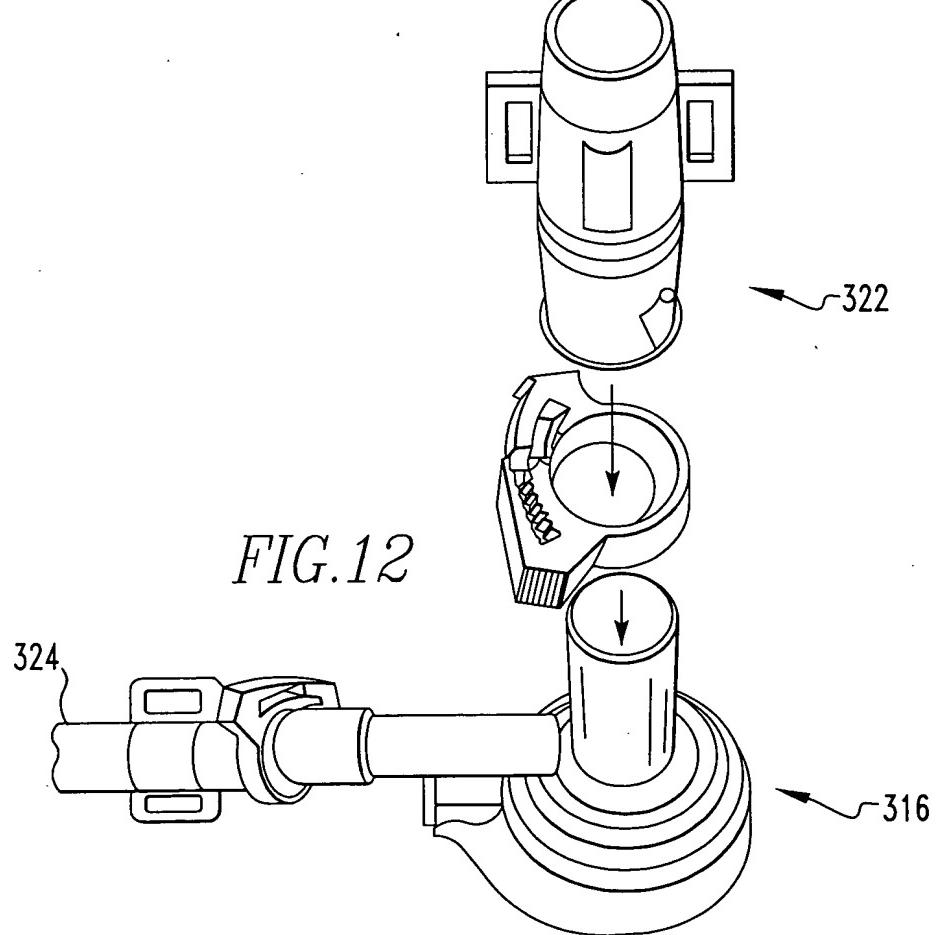


FIG.12



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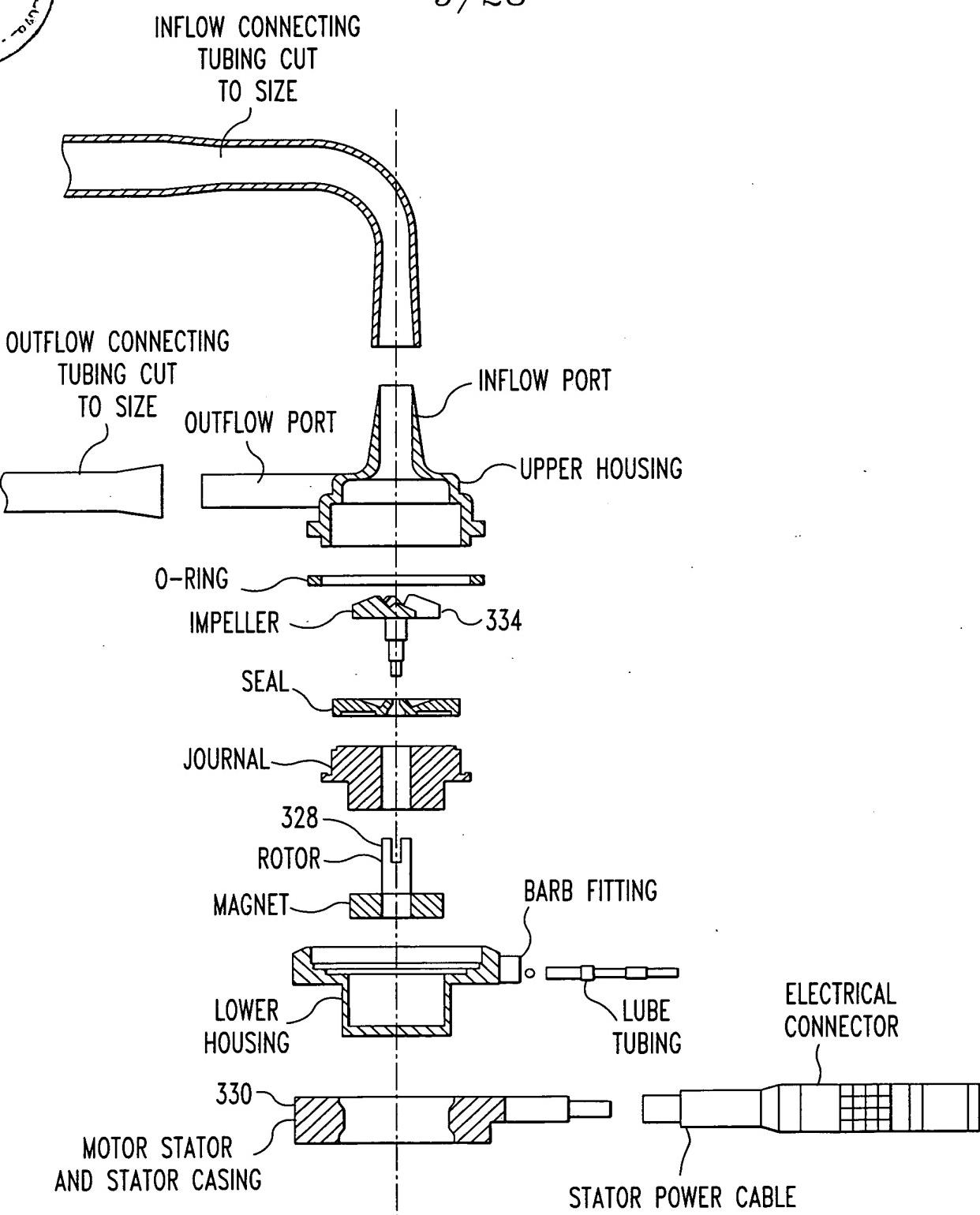
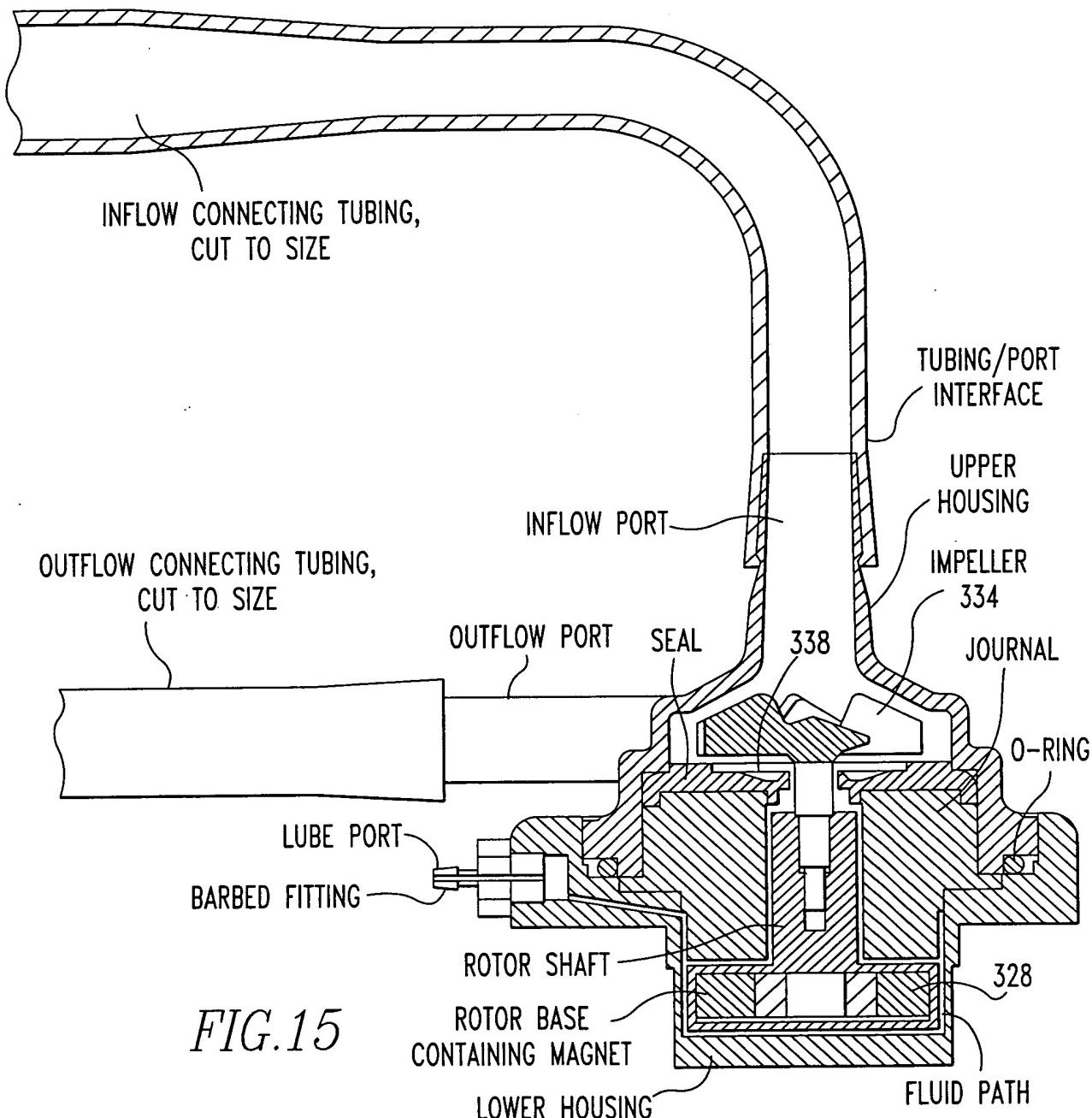


FIG.14

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JUN 17 2004
PITNEY BOWES INC.

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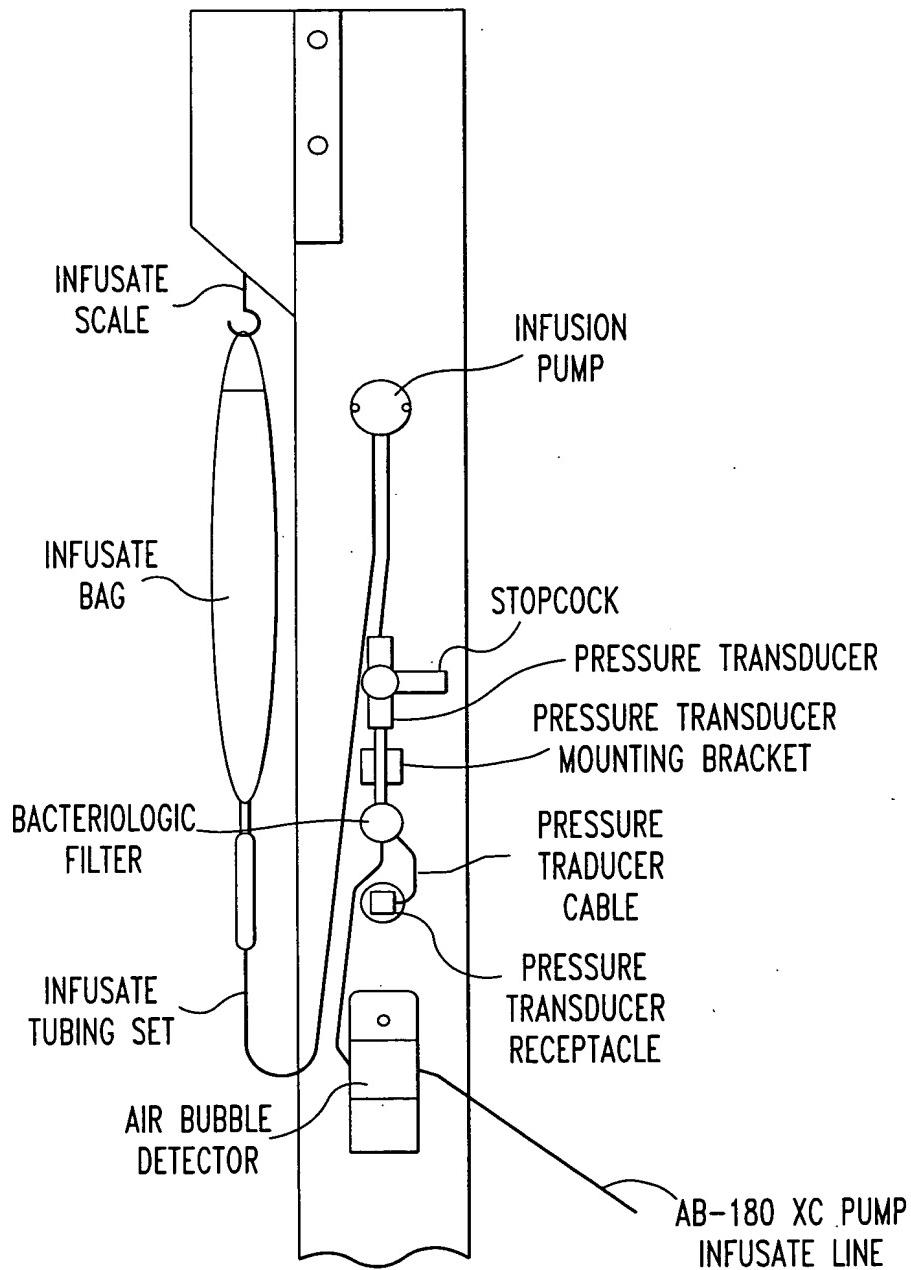


FIG.15a



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PATIENT

- PUMP DRIVE
- OCCL AIR
- LUBE FLUID

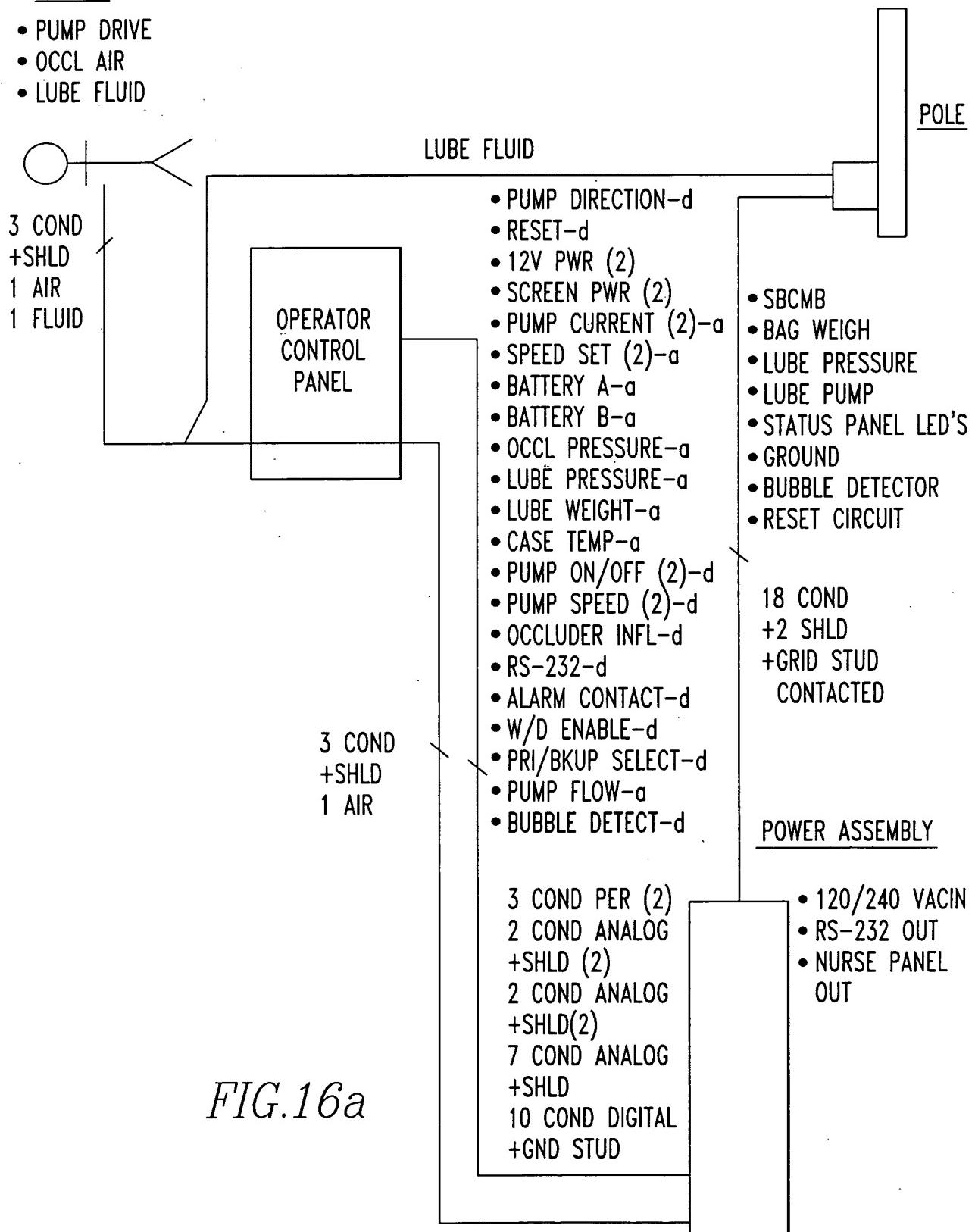


FIG.16a

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JC67
PITTSBURGH

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CONTROL PANEL

TO/FROM
POWER
ASSEMBLY

SWITCHES

- PUMP ON/OFF
- ALARM MUTE
- SPEED SET

LIGHTS

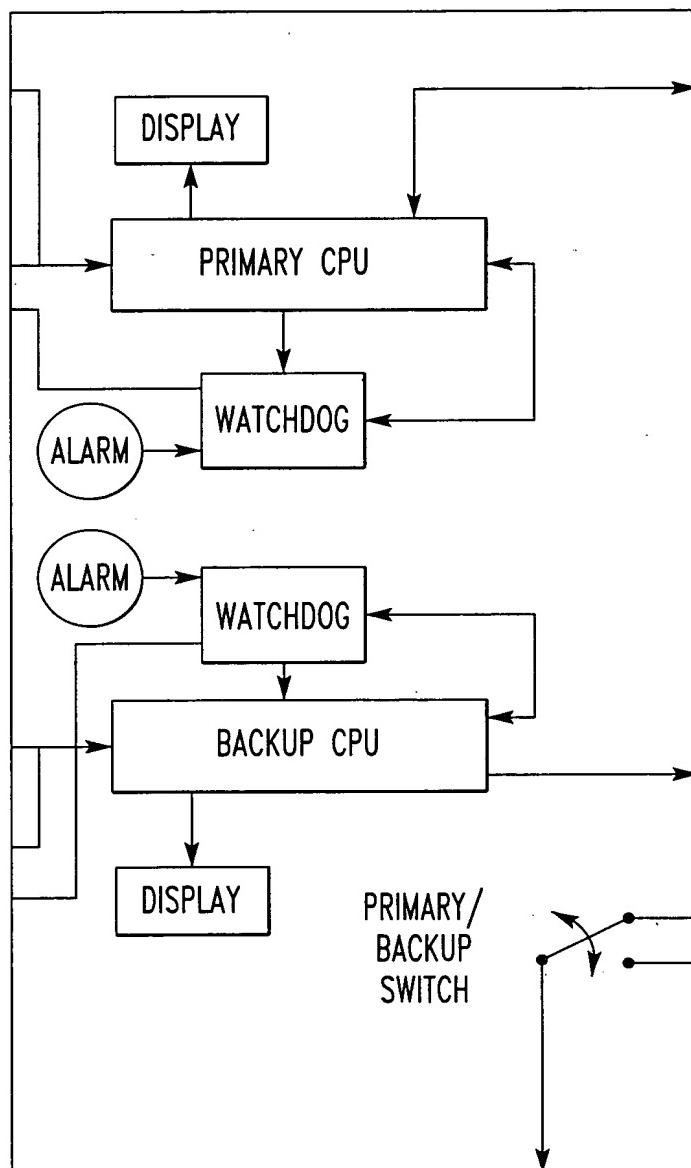
- PUMP ON
- OCCLUDER
- INFLATED/
BUBBLE DETECTED
- ALARM
- PRI/BKUP

SWITCH

- PUMP ON/OFF
- ALARM MUTE
- SPEED SET

LIGHTS

- PUMP ON
- OCCLUDER
- INFLATED/
BUBBLE DETECTED
- ALARM
- PRI/BKUP



- 12 V POWER, SENSE
- SCREEN POWER
- PUMP CURRENT
- SPEED SET
- PUMP ON/OFF
- PUMP SPEED
- PUMP DIRECTION
- BATTERY A
- BATTERY B
- OCCL. PRESSURE
- LUBE PRESSURE
- LUBE WEIGHT
- CASE TEMP
- W/D ENABLE
- OCCLUDER INFL
- RS-232
- ALARM CONTACT
- PRI/BKUP SELECT
- 12V POWER, SENSE
- SCREEN POWER
- PUMP CURRENT
- SPEED SET
- PUMP ON/OFF
- PUMP SPEED
- PUMP DRIVE
- OCCLU. AIR

TO PATIENT

- PUMP DRIVE
- OCCLU.AIR

FIG.16b

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POWER ASSEMBLY

TO POLE

- BUBBLE DETECTOR PWR
- LUBE PUMP PWR
- LUBE WT PER
- LUBE PRESSURE PWR

TO CONTROLLER

- LUBE WT
- LUBE PRESSURE
- PRI/BK SELECT
- PUMP DRIVE
- PUMP CURRENT A/B
- PUMP SPEED A/B
- SPEED SET A/B
- PUMP ON/OFF A/B
- PUMP DIRECTION
- OCCLUDER INFLATED
- OCCL AIR
- PRESSURE
- CASE TEMP
- SCREEN PWR A/B
- W/D ENABLE
- +12V A/B
- BATT B
- BATT A
- RS-232
- ALARM CONTACT

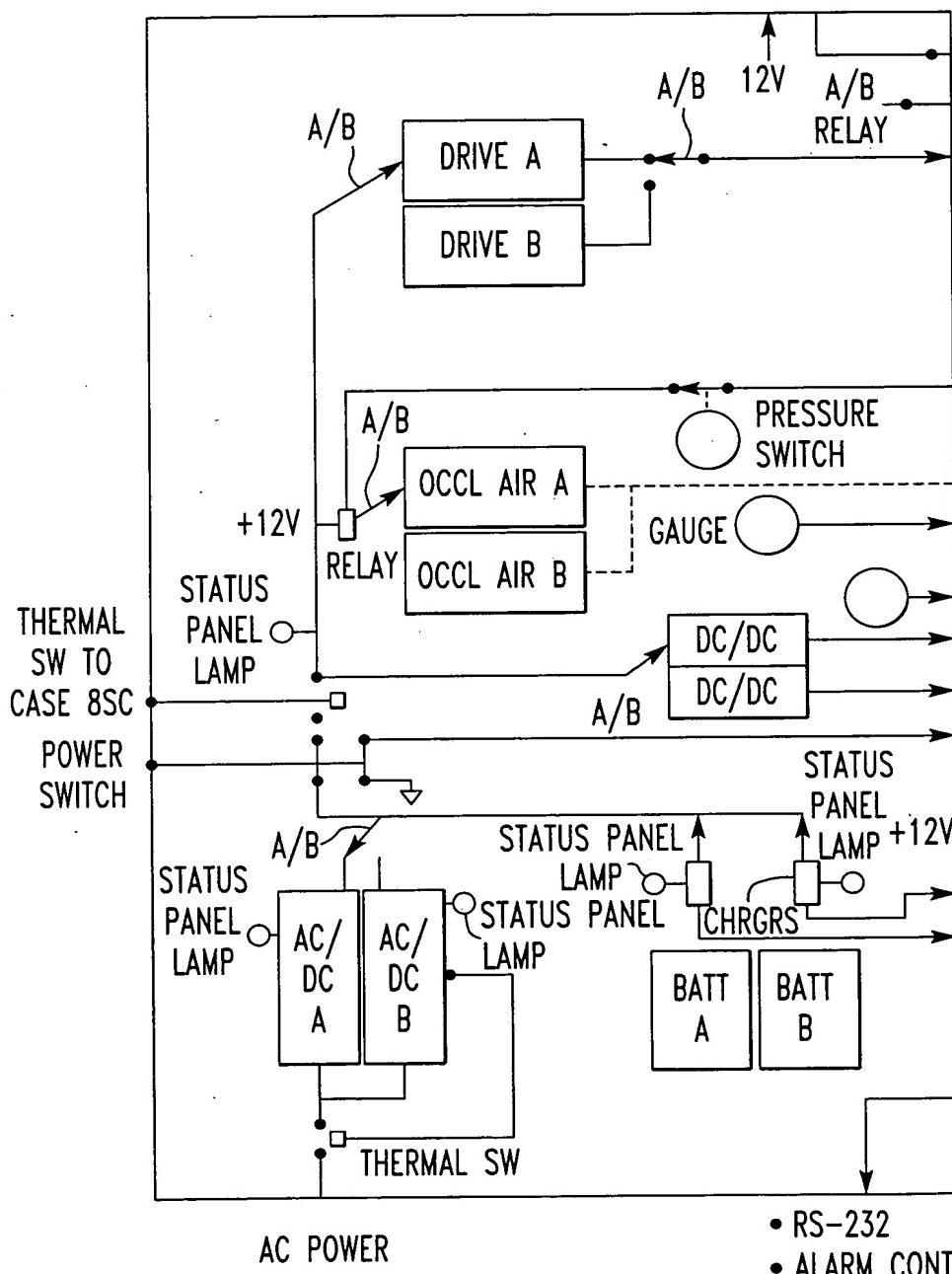


FIG.16C



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SBCMB CONNECTION DIAGRAM

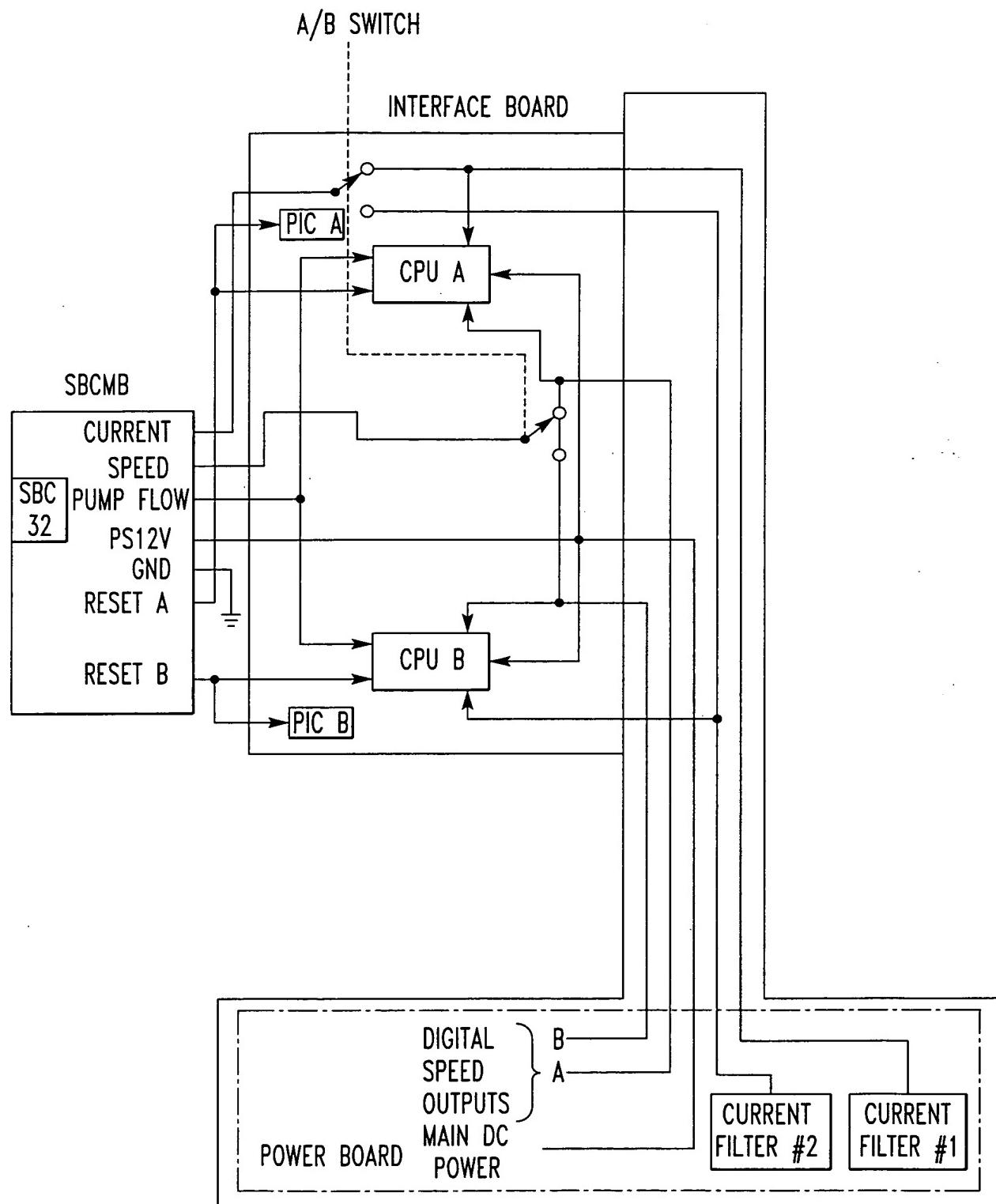
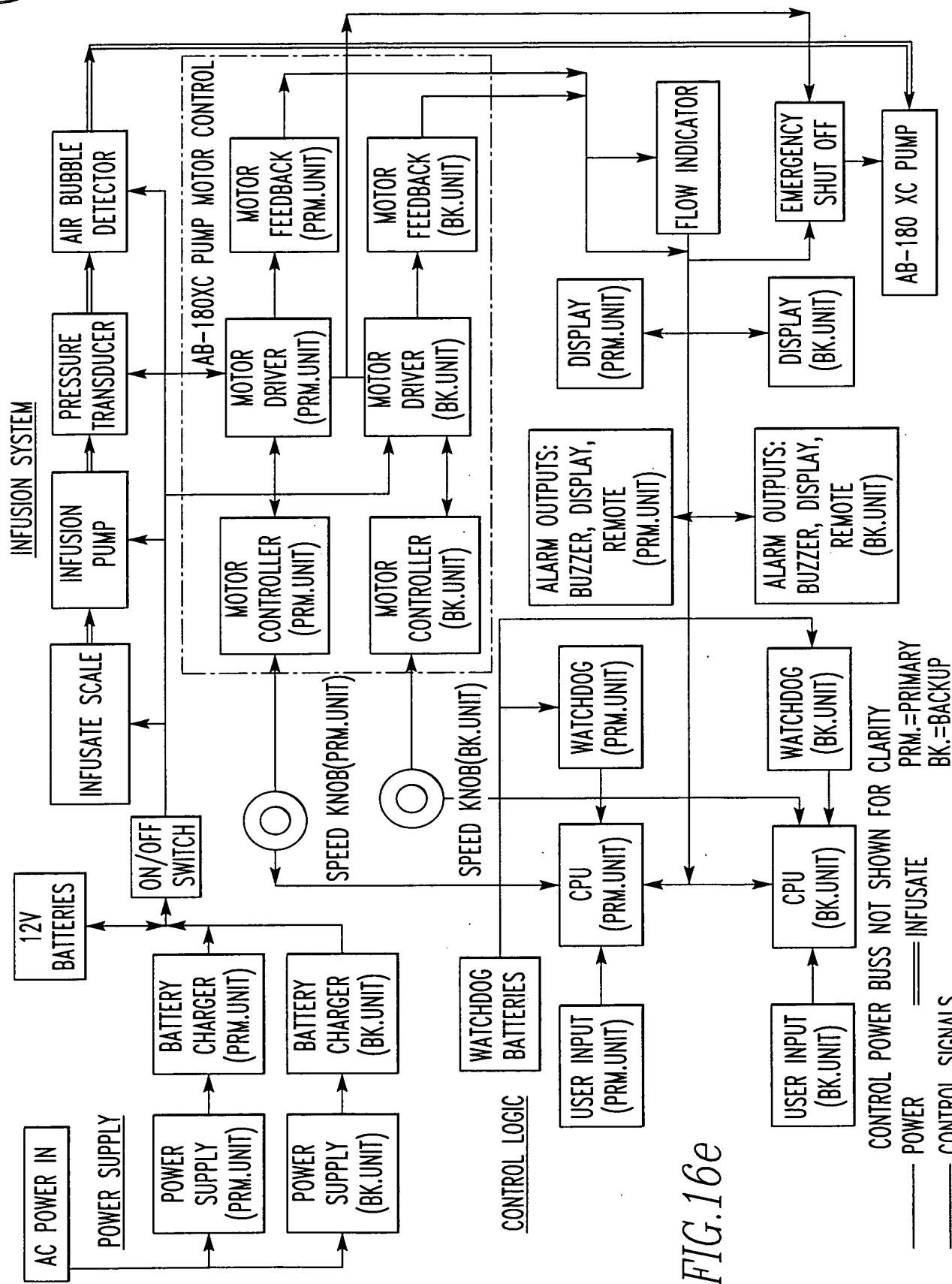
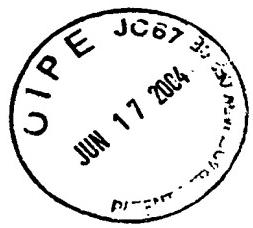


FIG.16d

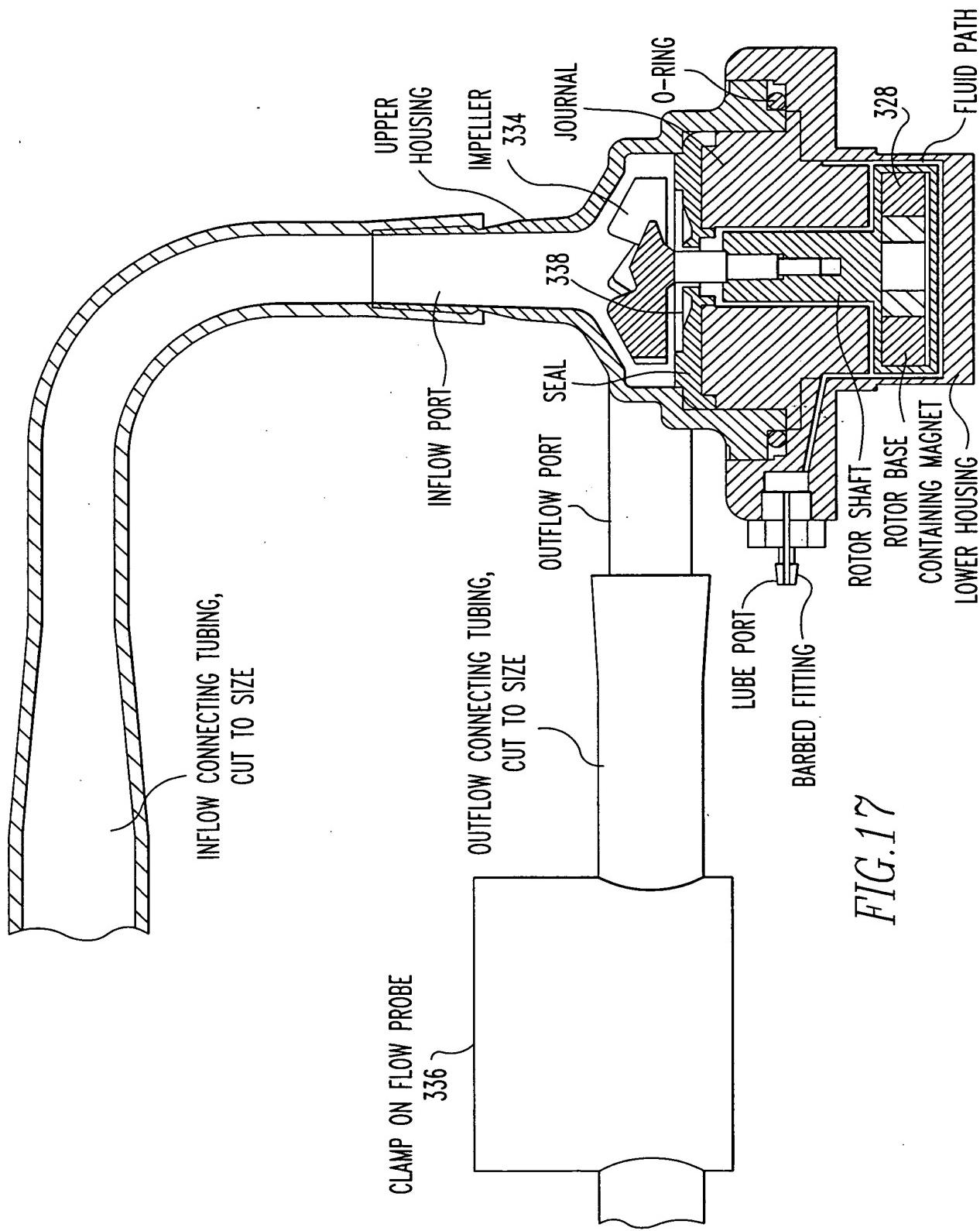
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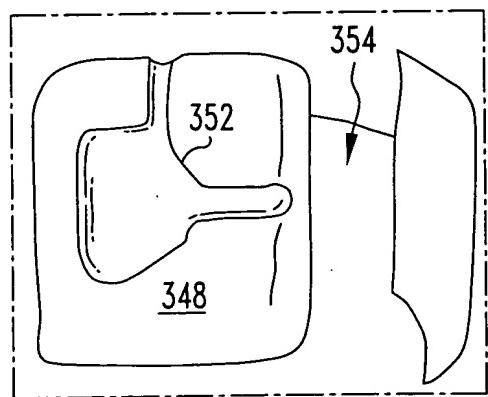
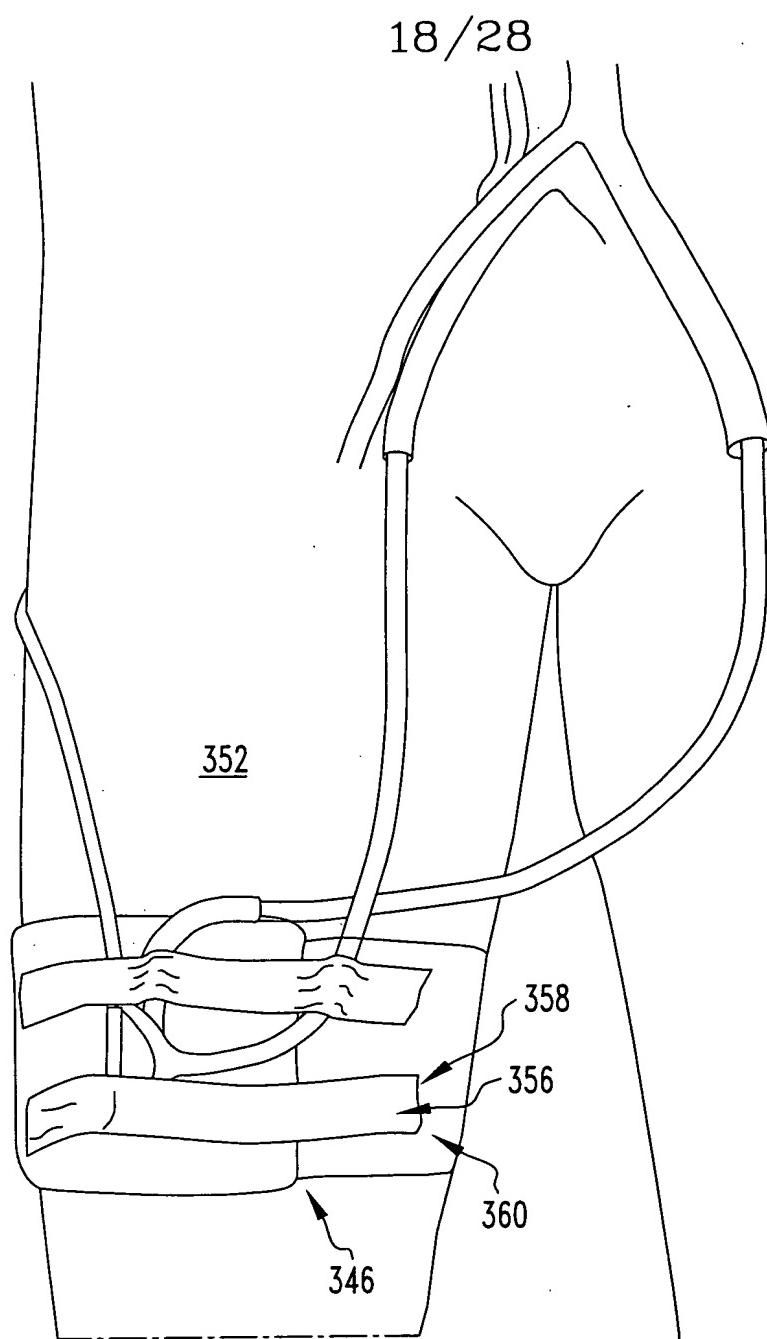


FIG.18
PATIENT PORTION
350



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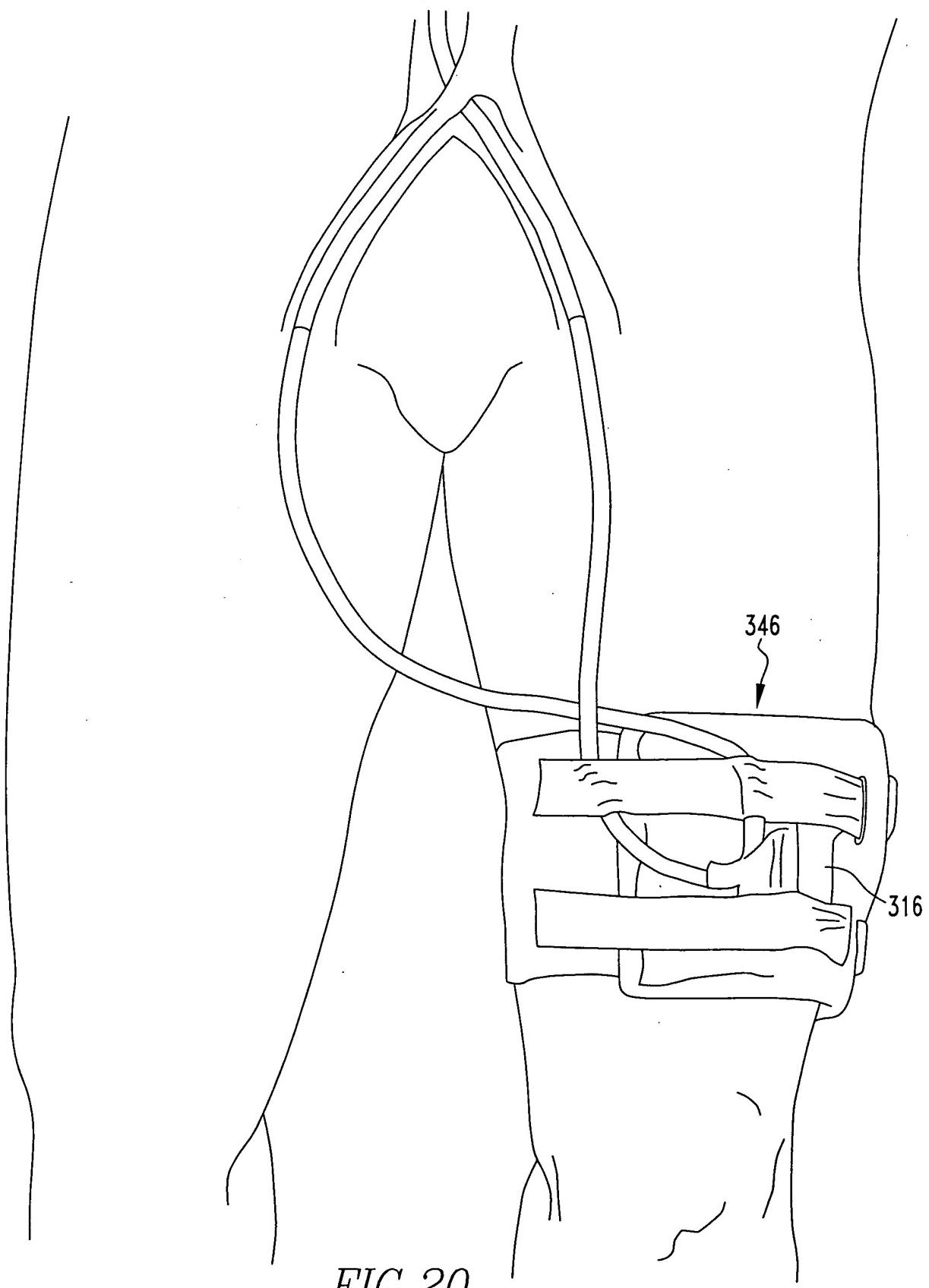


FIG. 20

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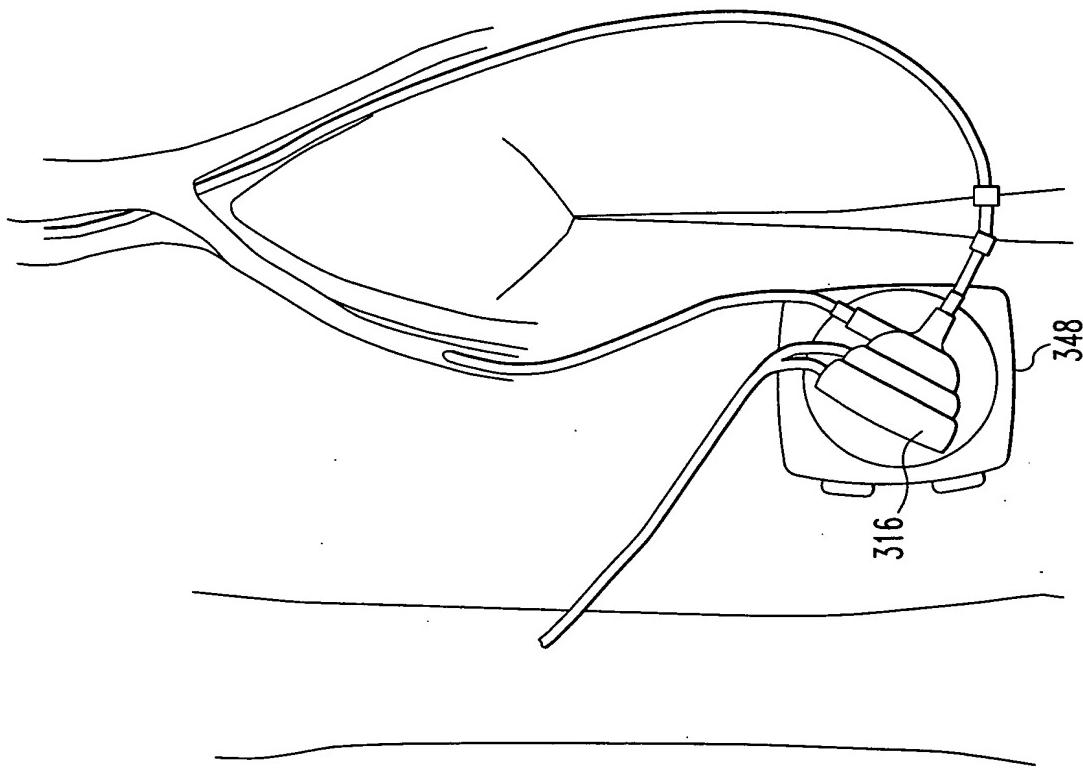


FIG. 22

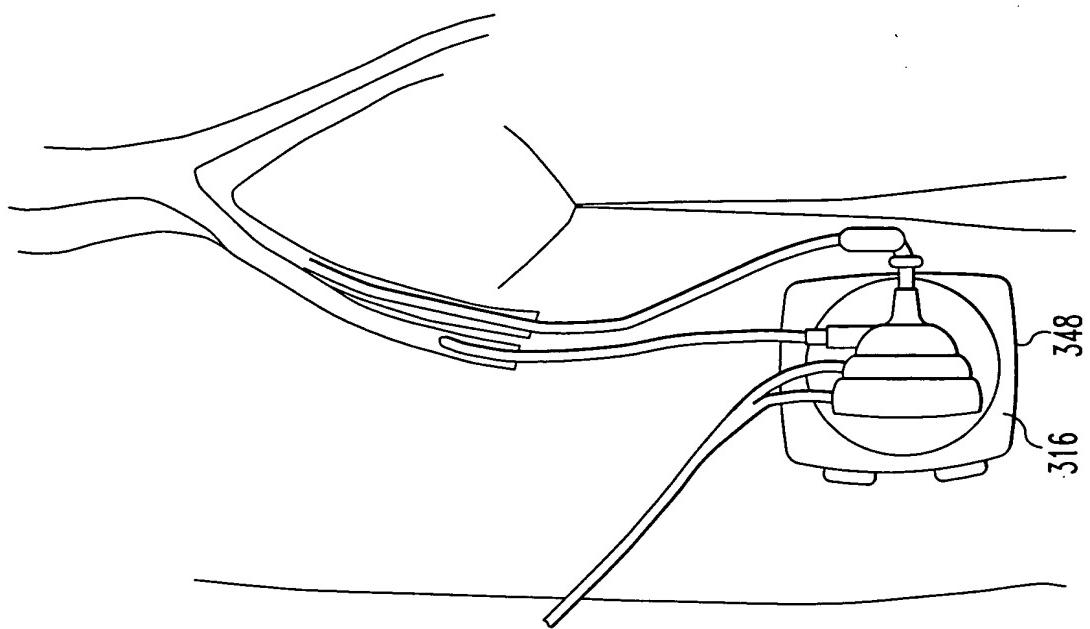


FIG. 21

U.S.P.T.O. JC67
JUN 17 2004
PATENT AND TRADEMARK OFFICE

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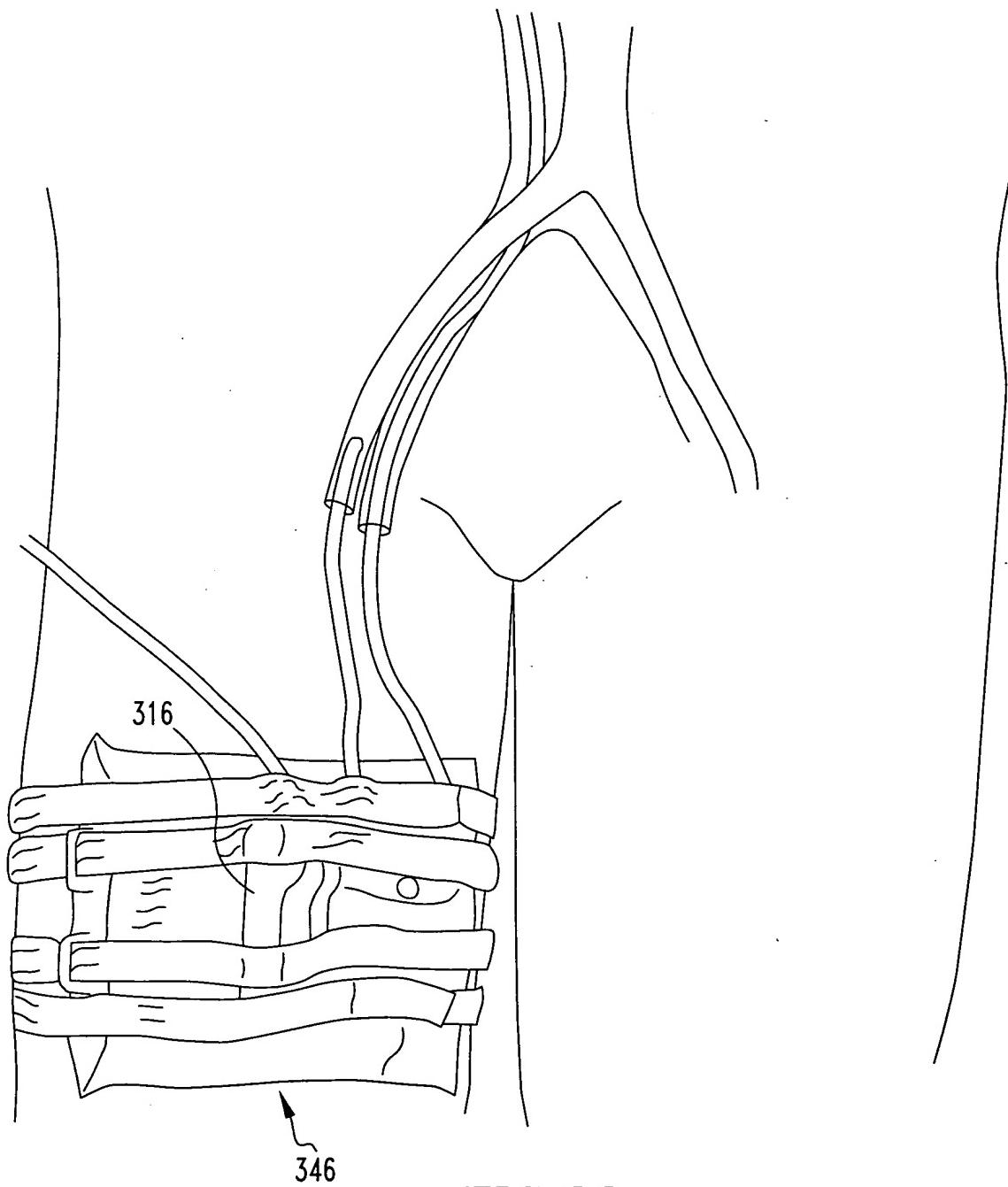
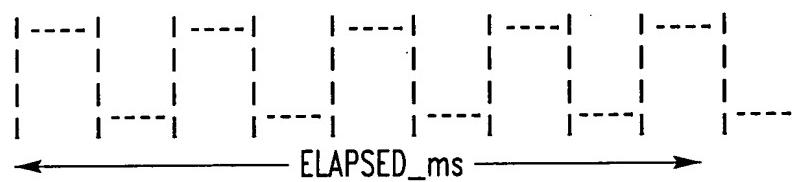


FIG. 23



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PULSE RATE = NUMBER OF TRAILING EDGES COUNTED DURING THE TIME INTERVAL.
ELAPSED_ms = ACTUAL NUMBER OF MILLISECONDS IN THE TIME INTERVAL.

FIG.24

U.S.P.E. J.C.67
JUN 17 2004
PATENTED - 2007 - 2008

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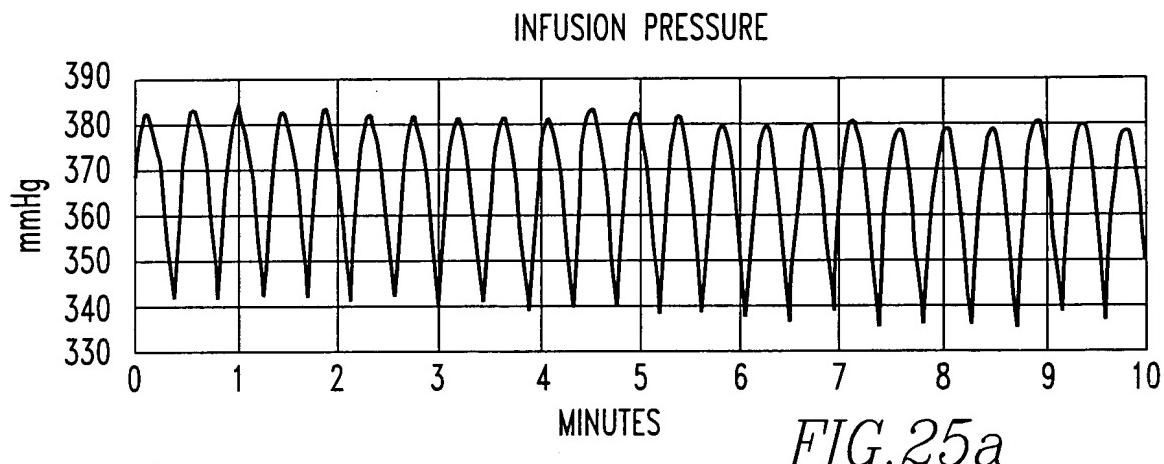


FIG.25a

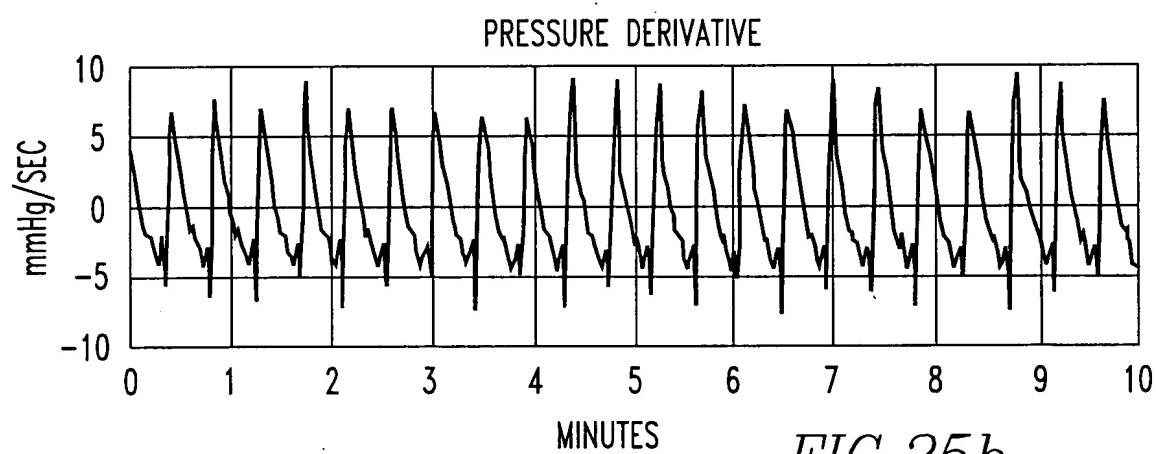


FIG.25b

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PATENT - GENEVA

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AB-180 XC BLOOD PUMP

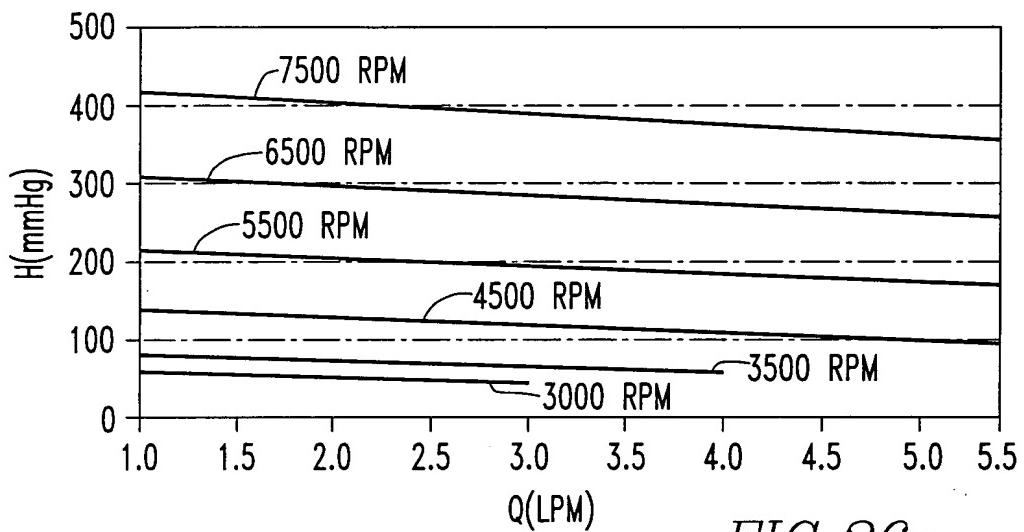


FIG.26a

FLOW RATE VS. PRESSURE DROP
CAT 21 FR. CANNULA

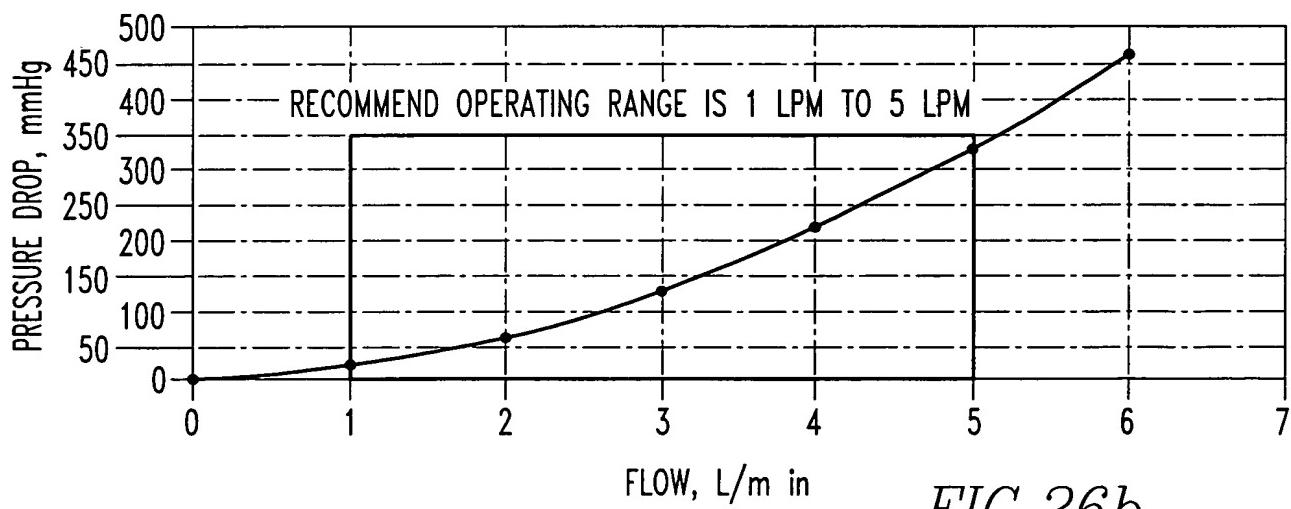


FIG.26b

U.S.P.E. JC67
JUN 17 2004
PATENT & TRADEMARK OFFICE

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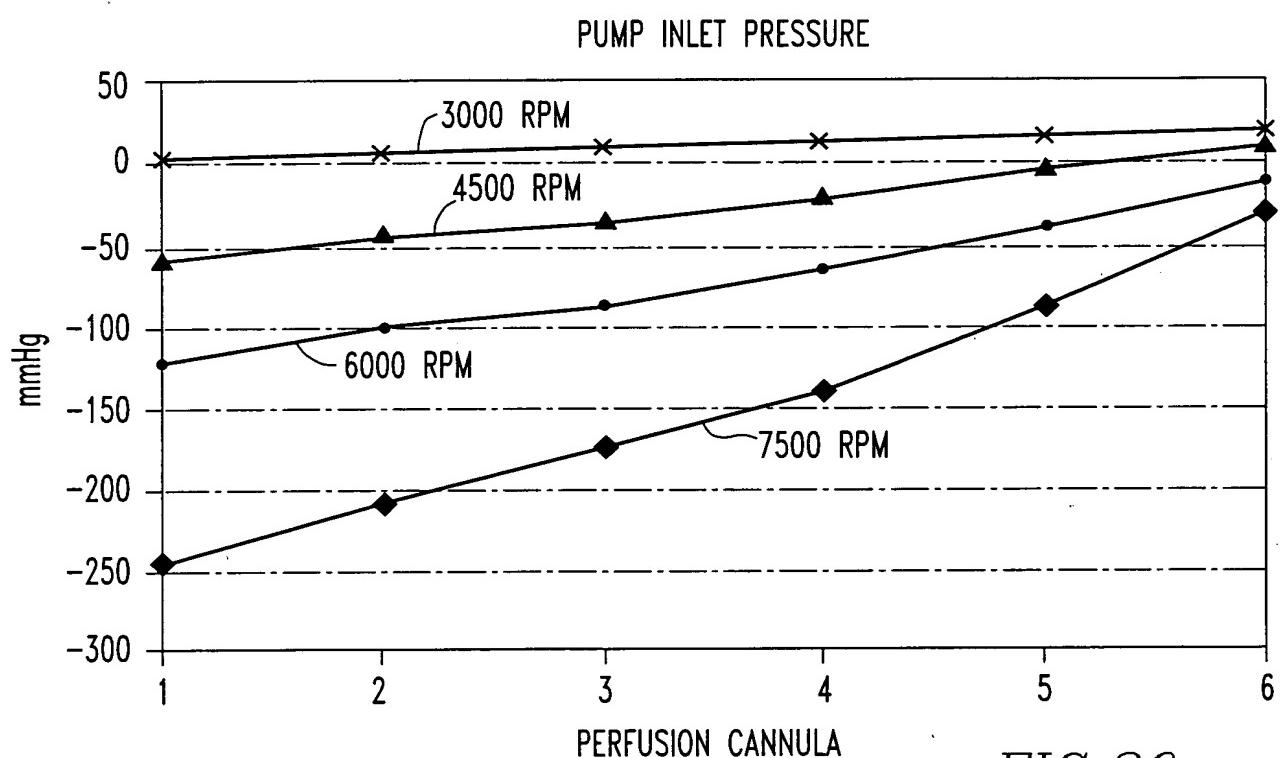
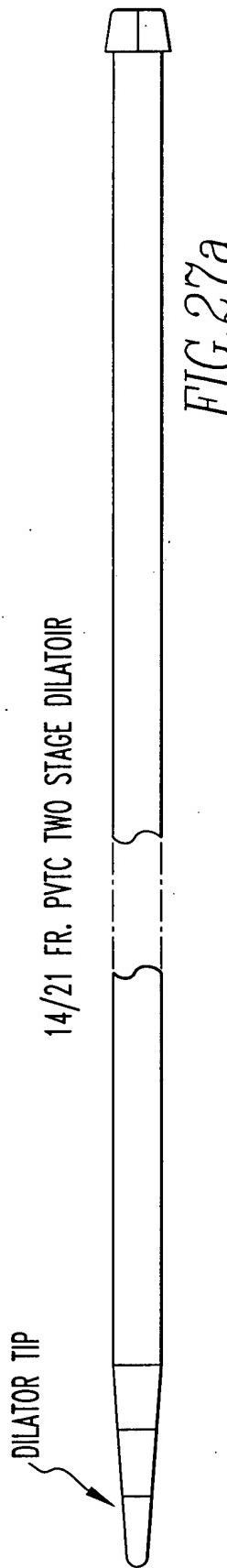
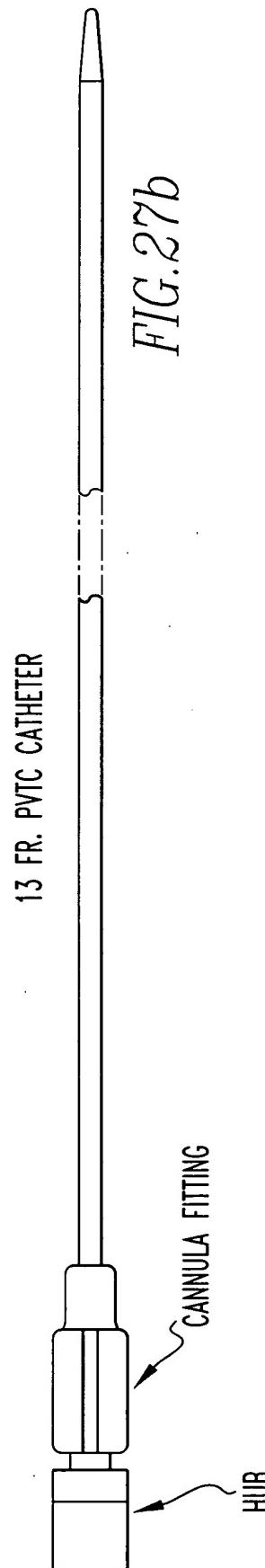
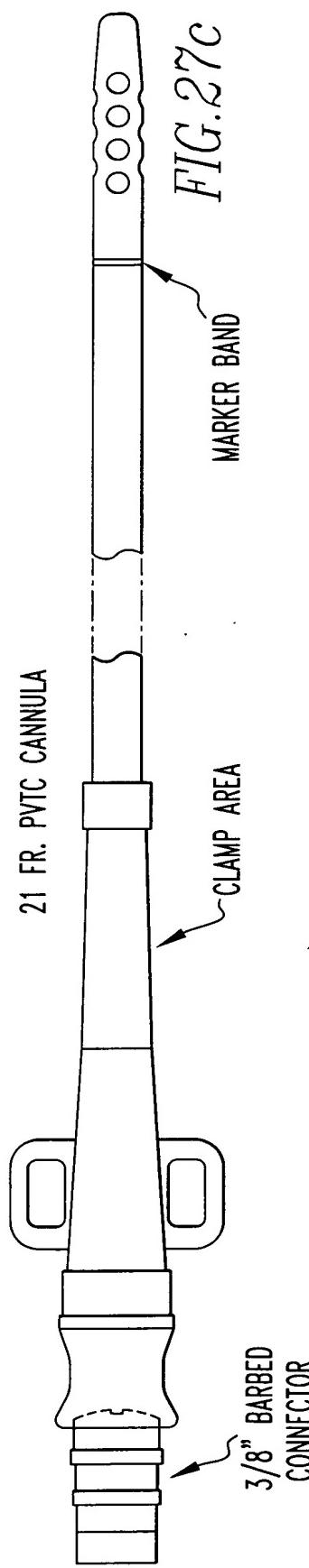


FIG.26c



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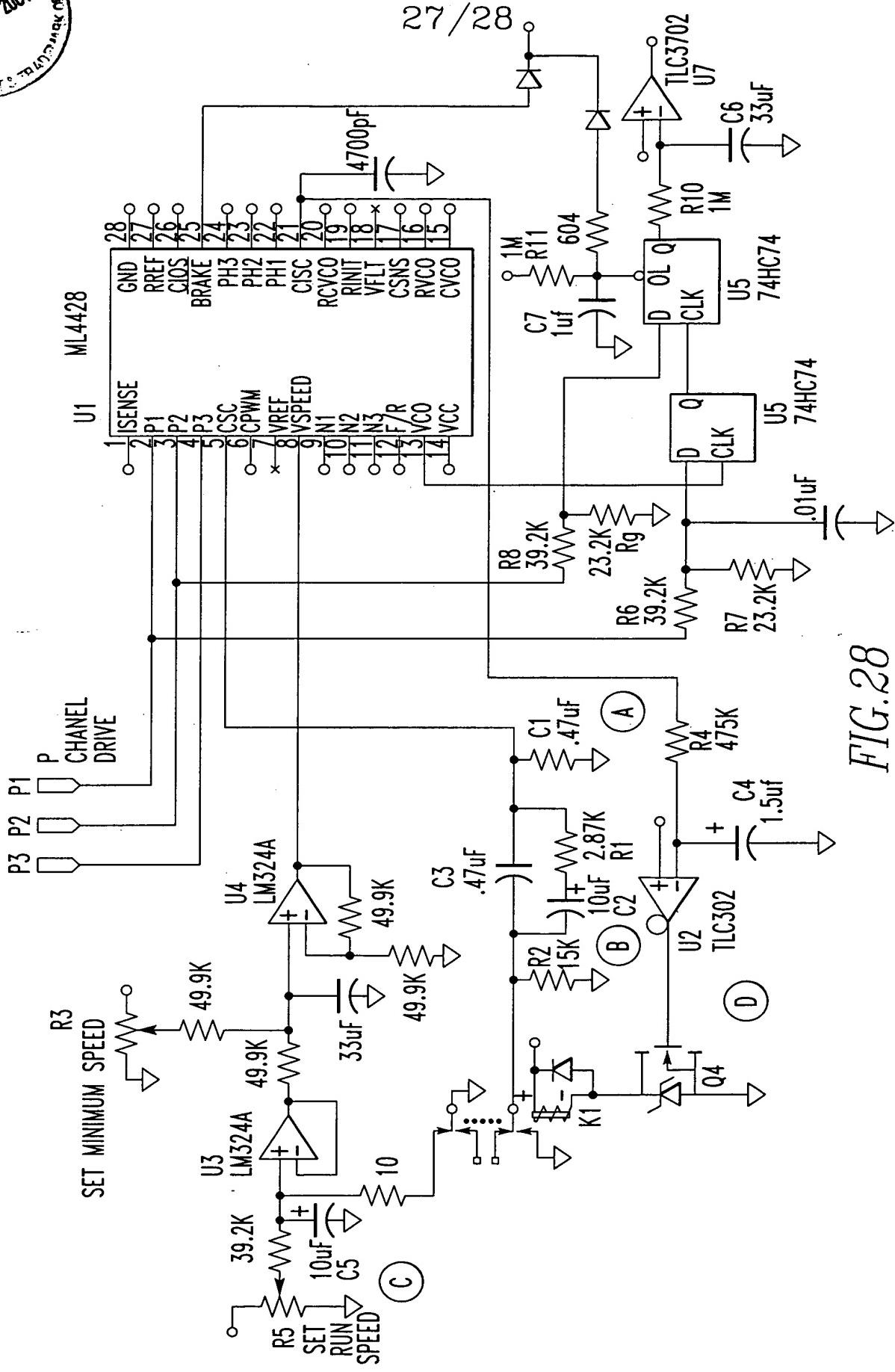
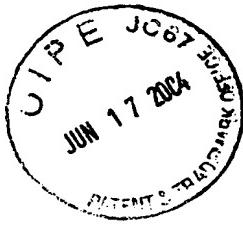


FIG. 28



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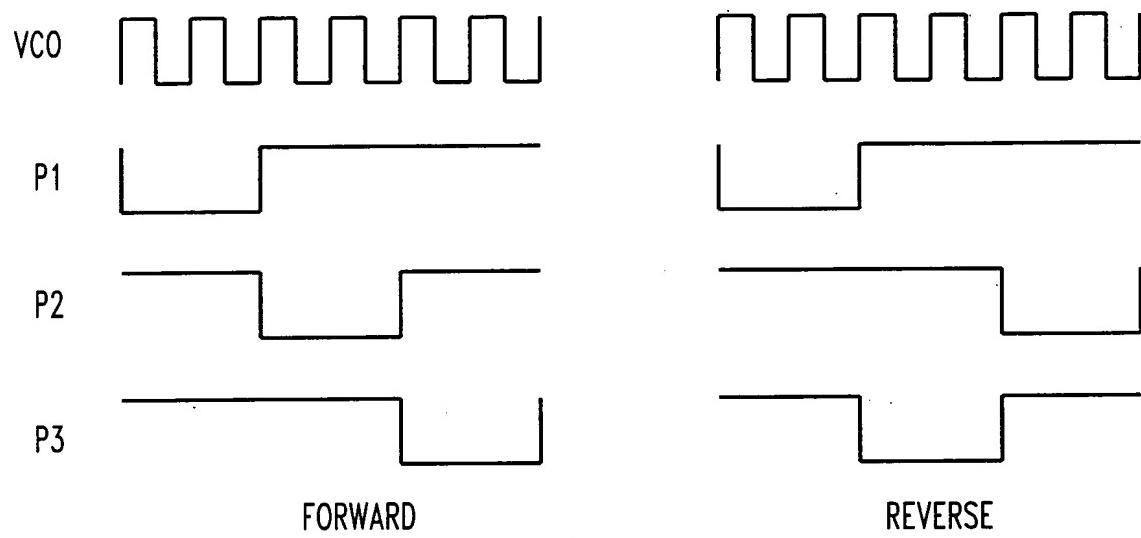


FIG.29